

§ 135.399 Small nontransport category airplane performance operating limitations.

(a) No person may operate a reciprocating engine or turbopropeller-powered small airplane that is certificated under § 135.169(b) (2), (3), (4), (5), or (6) unless that person complies with the takeoff weight limitations in the approved Airplane Flight Manual or equivalent for operations under this part, and, if the airplane is certificated under § 135.169(b) (4) or (5) with the landing weight limitations in the Approved Airplane Flight Manual or equivalent for operations under this part.

(b) No person may operate an airplane that is certificated under § 135.169(b)(6) unless that person complies with the landing limitations prescribed in §§ 135.385 and 135.387 of this part. For purposes of this paragraph, §§ 135.385 and 135.387 are applicable to reciprocating and turbopropeller-powered small airplanes notwithstanding their stated applicability to turbine engine powered large transport category airplanes.

[44 FR 53731, Sept. 17, 1979]

Subpart J—Maintenance, Preventive Maintenance, and Alterations

§ 135.411 Applicability.

(a) This subpart prescribes rules in addition to those in other parts of this chapter for the maintenance, preventive maintenance, and alterations for each certificate holder as follows:

(1) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine seats or less, shall be maintained under parts 91 and 43 of this chapter and §§ 135.415, 135.416, 135.417, 135.421 and 135.422. An approved aircraft inspection program may be used under § 135.419.

(2) Aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of ten seats or more, shall be maintained under a maintenance program in §§ 135.415, 135.416, 135.417, and 135.423 through 135.443.

(b) A certificate holder who is not otherwise required, may elect to main-

tain its aircraft under paragraph (a)(2) of this section.

(c) Single engine aircraft used in passenger-carrying IFR operations shall also be maintained in accordance with § 135.421 (c), (d), and (e).

[Doc. No. 16097, 43 FR 46783, Oct. 10, 1978, as amended by Amdt. 135-70, 62 FR 42374, Aug. 6, 1997; Amdt. 135-78, 65 FR 60556, Oct. 11, 2000; Amdt. 135-92, 68 FR 69308, Dec. 12, 2003; Amdt. 135-81, 70 FR 5533, Feb. 2, 2005]

§ 135.413 Responsibility for airworthiness.

(a) Each certificate holder is primarily responsible for the airworthiness of its aircraft, including airframes, aircraft engines, propellers, rotors, appliances, and parts, and shall have its aircraft maintained under this chapter, and shall have defects repaired between required maintenance under part 43 of this chapter.

(b) Each certificate holder who maintains its aircraft under § 135.411(a)(2) shall—

(1) Perform the maintenance, preventive maintenance, and alteration of its aircraft, including airframe, aircraft engines, propellers, rotors, appliances, emergency equipment and parts, under its manual and this chapter; or

(2) Make arrangements with another person for the performance of maintenance, preventive maintenance, or alteration. However, the certificate holder shall ensure that any maintenance, preventive maintenance, or alteration that is performed by another person is performed under the certificate holder's manual and this chapter.

§ 135.415 Mechanical reliability reports.

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect in an aircraft concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by related fire-warning system;

(3) False fire-warning during flight;

(4) An exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight because of flameout;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Shutdown of more than one engine during flight;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction or opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA; and

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut-down an engine).

(b) For the purpose of this section, *during flight* means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft that occurs or is detected at any time if, in its opinion, the failure, malfunction, or defect has endangered or may endanger the safe operation of the aircraft.

(d) Each certificate holder shall send each report required by this section, in writing, covering each 24-hour period beginning at 0900 hours local time of each day and ending at 0900 hours local time on the next day to the FAA Flight Standards District Office charged with the overall inspection of

the certificate holder. Each report of occurrences during a 24-hour period must be mailed or delivered to that office within the next 72 hours. However, a report that is due on Saturday or Sunday may be mailed or delivered on the following Monday and one that is due on a holiday may be mailed or delivered on the next work day. For aircraft operated in areas where mail is not collected, reports may be mailed or delivered within 72 hours after the aircraft returns to a point where the mail is collected.

(e) The certificate holder shall transmit the reports required by this section on a form and in a manner prescribed by the Administrator, and shall include as much of the following as is available:

(1) The type and identification number of the aircraft.

(2) The name of the operator.

(3) The date.

(4) The nature of the failure, malfunction, or defect.

(5) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since last overhaul, if known.

(6) Apparent cause of the failure, malfunction or defect (e.g., wear, crack, design deficiency, or personnel error).

(7) Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) A certificate holder that is also the holder of a type certificate (including a supplemental type certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a type certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under § 21.3 or § 37.17 of this chapter or under the accident reporting provisions of part 830 of the regulations of the National Transportation Safety Board.

(g) No person may withhold a report required by this section even though all information required by this section is not available.

(h) When the certificate holder gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

EFFECTIVE DATE NOTE 1: By Amdt. 135-77, 65 FR 56204, Sept. 15, 2000, §135.415 was amended by revising the section heading and paragraphs (a), (c), (d), (e), and (f); redesignating paragraphs (g) and (h) as paragraphs (h) and (i) respectively; revising newly redesignated paragraph (i); and by adding a new paragraph (g), effective Jan. 16, 2001. At 65 FR 80743, Dec. 22, 2000, the effective date was delayed until July 16, 2001. At 66 FR 21626, the effective date was delayed until Jan. 16, 2002. At 66 FR 58912, Nov. 23, 2001, the effective date was delayed until Jan. 16, 2003. At 67 FR 78970, Dec. 27, 2002, the effective date was delayed until Jan. 16, 2004. At 68 FR 75116, Dec. 30, 2003, the effective date was delayed until Jan. 30, 2006. At 70 FR 76979, Dec. 29, 2005, this amendment was withdrawn, effective Jan. 30, 2006. For the convenience of the user, the added and revised text is set forth as follows:

§135.415 Service difficulty reports (operational).

(a) Each certificate holder shall report the occurrence or detection of each failure, malfunction, or defect concerning—

- (1) Any fire and, when monitored by a related fire-warning system, whether the fire-warning system functioned properly;
- (2) Any false warning of fire or smoke;
- (3) An engine exhaust system that causes damage to the engine, adjacent structure, equipment, or components;
- (4) An aircraft component that causes the accumulation or circulation of smoke, vapor, or toxic or noxious fumes;
- (5) Any engine flameout or shutdown during flight or ground operations;
- (6) A propeller feathering system or ability of the system to control overspeed;
- (7) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage;
- (8) A landing gear extension or retraction, or the opening or closing of landing gear doors during flight;
- (9) Any brake system component that results in any detectable loss of brake actuating force when the aircraft is in motion on the ground;
- (10) Any aircraft component or system that results in a rejected takeoff after initiation of the takeoff roll or the taking of emergency action, as defined by the Aircraft Flight Manual or Pilot's Operating Handbook;

(11) Any emergency evacuation system or component including any exit door, passenger emergency evacuation lighting system, or evacuation equipment found to be defective, or that fails to perform the intended function during an actual emergency or during training, testing, maintenance, demonstrations, or inadvertent deployments; and

(12) Autothrottle, autoflight, or flight control systems or components of these systems.

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(c) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure, malfunction, or defect in an aircraft, system, component, or powerplant that occurs or is detected at any time if that failure, malfunction, or defect has endangered or may endanger the safe operation of an aircraft.

(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point where the mail is collected. Each certificate holder also shall make the report data available for 30 days for examination by the certificate-holding district office in a form and manner acceptable to the Administrator.

(e) The certificate holder shall submit the reports required by this section on a form or in another format acceptable to the Administrator. The reports shall include the following information:

- (1) The manufacturer, model, and serial number of the aircraft, engine, or propeller;
- (2) The registration number of the aircraft;
- (3) The operator designator;
- (4) The date on which the failure, malfunction, or defect was discovered;
- (5) The stage of flight or ground operation during which the failure, malfunction, or defect was discovered;
- (6) The nature of the failure, malfunction, or defect;
- (7) The applicable Joint Aircraft System/Component Code;
- (8) The total cycles, if applicable, and total time of the aircraft, aircraft engine, propeller, or component;

(9) The manufacturer, manufacturer part number, part name, serial number, and location of the component that failed, malfunctioned, or was defective, if applicable;

(10) The manufacturer, manufacturer part number, part name, serial number, and location of the part that failed, malfunctioned, or was defective, if applicable;

(11) The precautionary or emergency action taken;

(12) Other information necessary for more complete analysis of the cause of the failure, malfunction, or defect, including available information pertaining to type designation of the major component and the time since the last maintenance overhaul, repair, or inspection; and

(13) A unique control number for the occurrence, in a form acceptable to the Administrator.

(f) A certificate holder that also is the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval, or a Technical Standard Order authorization, or that is a licensee of a Type Certificate holder, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by that certificate holder under § 21.3 of this chapter or under the accident reporting provisions of 49 CFR part 830.

(g) A report required by this section may be submitted by a certificated repair station when the reporting task has been assigned to that repair station by a part 135 certificate holder. However, the part 135 certificate holder remains primarily responsible for ensuring compliance with the provisions of this section. The part 135 certificate holder shall receive a copy of each report submitted by the repair station.

(h) No person may withhold a report required by this section although all information required by this section is not available.

(i) When a certificate holder gets supplemental information to complete the report required by this section, the certificate holder shall expeditiously submit that information as a supplement to the original report and use the unique control number from the original report.

EFFECTIVE DATE NOTE 2: At 70 FR 76979, Dec. 29, 2005, § 135.415 was amended by revising the heading and paragraph (d), effective Jan. 30, 2006. For the convenience of the user, the revised text follows:

§ 135.415 Service difficulty reports.

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(d) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to the FAA of-

fices in Oklahoma City, Oklahoma. Each report of occurrences during a 24-hour period shall be submitted to the collection point within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday.

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§ 135.416 Service difficulty reports (structural).

(a) Each certificate holder shall report the occurrence or detection of each failure or defect related to—

(1) Corrosion, cracks, or disbonding that requires replacement of the affected part;

(2) Corrosion, cracks, or disbonding that requires rework or blendout because the corrosion, cracks, or disbonding exceeds the manufacturer's established allowable damage limits;

(3) Cracks, fractures, or disbonding in a composite structure that the equipment manufacturer has designated as a primary structure or a principal structural element; or

(4) Repairs made in accordance with approved data not contained in the manufacturer's maintenance manual.

(b) In addition to the reports required by paragraph (a) of this section, each certificate holder shall report any other failure or defect in aircraft structure that occurs or is detected at any time if that failure or defect has endangered or may endanger the safe operation of an aircraft.

(c) Each certificate holder shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to a centralized collection point as specified by the Administrator. Each report of occurrences during a 24-hour period shall be submitted to the FAA within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday. For aircraft operating in areas where mail is not collected, reports may be submitted within 24 hours after the aircraft returns to a point